

ABSTRACT OF THE DISCLOSURE

[0033] A cast vane cluster with enhanced cooling contains an inner
5 and an outer platform and at least two airfoils for directing a primary
fluid stream axially rearward. A duct is bounded by inner, an outer
endwall surfaces, and adjacent airfoil fluid directing surfaces. One or
more cooling holes in the duct are drilled using an electrodischarge
machine (EDM) method without a line of sight from the drilling equipment
10 to the cooling hole location. One or more cooling holes, located in
portions of the duct, may not be visible when viewed from an external
location. Additionally, one or more cooling holes may only have an outlet
cross sectional area visible when viewed along a longitudinal axis from
an external location.